# **NEWS RELEASE**

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**13-Year-Olds’ Reading and Math Scores Decline Since 2012;**

**9-Year-Olds’ Scores Did Not Change**

*Both 9- and 13-year-olds score higher than their counterparts in the 1970s*

WASHINGTON (October 14, 2021)—The reading and mathematics scores of 13-year-old students fell between 2012 and 2020—the first time in the almost 50-year history of the National Assessment of Educational Progress (NAEP) long-term trend (LTT) assessment—according to results released today by the National Center for Education Statistics (NCES). The performance of 9-year-olds remained the same in both subjects compared to 2012.

In both age groups and subjects, the scores of lower-performing students declined since 2012, the previous assessment year, mirroring patterns observed in other subjects assessed by NAEP, also known as The Nation’s Report Card.

“This was the first time in the almost 50-year history of the long-term trend assessments that we observed declines among 13-year-olds,” said NCES Commissioner Peggy G. Carr. “These performance drops are especially notable among lower-performing students, who no longer demonstrate competency in skills that students were able to do almost a decade ago in both subjects and age groups.”

The mathematics scores for the lower-performing students (students at the 10th and 25th percentile) declined among students from both age groups from the previous assessment in 2012. Scores also declined in mathematics for 13-year-olds at the 50th percentile. Scores for higher-performing students (at the 75th and 90th percentiles) did not change.

Reading scores declined for both the lowest-performing 9-year-olds and 13-year-olds at the 10th percentile, the only percentile group with significant change between 2012 and 2020.

## **Student group performance and score gap changes since 2012**

Mathematics scores at age 9 declined for females but did not change significantly for males since 2012. This resulted in a score gap, with males outperforming females in 2020—a change from 2012, when there was no score difference between the genders.

Scores declined for Black and Hispanic 13-year-olds in mathematics since 2012, while scores for White students and students of other races/ethnicities did not change. The score decline for Black students resulted in a wider score gap with White students compared to 2012.

There were no significant score changes by race/ethnicity or gender in reading since 2012.

## **Gains since the 1970s**

Both reading and mathematics scores have improved for 9- and 13-year-olds since the NAEP LTT assessment began in the early 1970s. The first LTT assessment in reading was administered in 1971, and the first LTT assessment in mathematics was administered in 1973.

Scores improved for 9- and 13-year-old students in all racial/ethnic groups and genders compared to the 1970s.

In comparison to scores in the 1970s, the 2020 scores in reading and mathematics were higher at all selected percentiles (10th, 25th, 50th, 75th, and 90th), with one exception: The reading score for the lowest-performing 13-year-old students at the 10th percentile was not significantly different compared to 1971.

“Scores were declining, particularly for the lowest-performing students, before the pandemic,” said Commissioner Carr. “Next year’s long-term trend assessment of 9-year-olds will provide insight into the performance of students in this age group after the widespread school closures in March 2020.”

The National Assessment Governing Board recently amended the long-term trend assessment schedule to collect data on 9-year-olds during the 2021-22 school year, earlier than normal, to begin assessing student achievement since the COVID-19 pandemic began.

## **Results by Subject**

*Reading*

* The average reading score (220) for 9-year-old students was 12 points higher in 2020 than in 1971, but not significantly different from the average score in 2012.
* The average reading score (260) for 13-year-old students was 5 points higher in 2020 than in 1971, but 3 points lower than in 2012.
* Scores in reading for the lowest-performing 9- and 13-year-old students (at the 10th percentile) decreased from 2012.
* The percentages of 9-year-olds and 13-year-olds who report that they “never or hardly ever” read for fun have increased significantly since the question was first included in the questionnaire in 1984. Sixteen percent of 9-year-olds answered the question that way in 2020, compared to 9 percent in 1984. For the 13-year-olds, the percentages were 29 percent in 2020 and 8 percent in 1984.
* Major student groups (e.g., race/ethnicity and gender) have improved since the earliest assessment.

*Mathematics*

* The average mathematics score (241) for 9-year-old students was 22 points higher in 2020 than in 1973, but not significantly different from the average score in 2012.
* The average mathematics score (280) for 13-year-old students was 14 points higher in 2020 than in 1973, but 5 points lower than in 2012.
* Scores in mathematics for lower-performing 9- and 13-year-old students (at the 10th and 25th percentiles) decreased from 2012.
* Both male and female 13-year-olds scored lower in mathematics compared to 2012, but scored higher compared to 1978.
* Higher-performing 13-year-old students in 2020 were more likely to report current enrollment in an algebra class.
* Major student groups (e.g., race/ethnicity and gender) have improved since the earliest assessment.

## How Results Are Reported

Student performance on the LTT assessments is reported in four ways: scale scores, percentile scores, student group scores and score gaps, and performance levels.

Scale scores represent the average performance of students on a scale of 0 to 500. Scores are reported at the national level and for groups of students based on racial/ethnic, gender, and other demographic characteristics.

Performance levels provide another perspective for interpreting LTT results. Changes in the percentages at or above each performance level reflect changes in the proportion of students who demonstrated the knowledge and skills associated with that level in responding to assessment questions. The performance-level descriptions used on the NAEP LTT assessment are different from the [achievement-level](https://nces.ed.gov/nationsreportcard/glossary.aspx#achieve) descriptions in the main NAEP reports.

## About the Assessment

Since the 1970s, the National Assessment of Educational Progress (NAEP) has monitored student performance in mathematics and reading through the long-term trend (LTT) assessments. These assessments measure students' educational progress over long time periods to look for and monitor trends in performance. The LTT assessment is age-based, rather than grade-based, and assesses 9-year-old and 13-year-old students.

NAEP measures basic reading and mathematics skills to gauge how the performance of U.S. students has changed over time. Reading was first assessed in 1971 and mathematics in 1973. The LTT reading assessment asks students to read short texts and answer mostly multiple-choice questions, though there are a few questions requiring short or extended answers. For mathematics, students are given three 15-minute sections of mostly multiple-choice questions related to basic math facts, computations, formulas, and real-life applications.

The 2020 Long-Term Trend assessments were administered during the 2019-20 school year. The assessment was administered to 13-year-olds between October and December 2019, and 9-year-olds were assessed between January and March 2020.

Visit <https://www.nationsreportcard.gov/> to view the report.

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*The National Center for Education Statistics, a principal agency of the U.S. Federal Statistical System, is the statistical center of the U.S. Department of Education and the primary federal entity for collecting and analyzing data related to education in the U.S. and other nations. NCES fulfills a congressional mandate to collect, collate, analyze, and report complete statistics on the condition of American education; conduct and publish reports; and review and report on education activities internationally.*

*The National Assessment of Educational Progress (NAEP) is a congressionally authorized project sponsored by the U.S. Department of Education. The National Center for Education Statistics, within the Institute of Education Sciences, administers NAEP. The commissioner of the National Center for Education Statistics is responsible by law for carrying out the NAEP project. Policy for the NAEP program is set by the National Assessment Governing Board, an independent, bipartisan board whose members include governors, state legislators, local and state school officials, educators, business representatives and members of the general public.*